



**International
Standard**

ISO 2773

**Test conditions for pillar type
vertical drilling machines — Testing
of accuracy**

*Conditions d'essais des machines à percer verticales à colonne —
Contrôle de l'exactitude*

**First edition
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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 39, *Machine tools*, Subcommittee SC 2, *Test conditions for metal cutting machine tools*.

This first edition of ISO 2773 cancels and replaces ISO 2773-1:1973 and ISO 2773-2:1973.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

The purpose of this document is to standardize methods of testing the accuracy of pillar type vertical drilling machines including geometrical tests.

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Test conditions for pillar type vertical drilling machines — Testing of accuracy

1 Scope

This document specifies, with reference to ISO 230-1, geometrical tests on general purpose and normal accuracy pillar type vertical drilling machines. This document also specifies the applicable tolerances corresponding to the above-mentioned tests.

This document covers only the verification of accuracy of the machine.

This document does not apply to the testing of the machine operation (vibrations, abnormal noises, stick-slip motion of components, etc.) or to machine characteristics (such as speeds and feeds), which are generally checked before testing of machine accuracy.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 230-1:2012, *Test code for machine tools — Part 1: Geometric accuracy of machines operating under no-load or quasi-static conditions*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 230-1 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1

manual drilling machine

drilling machine where the axial motion of the cutting tool is controlled through the actuation of a handwheel or lever

Note 1 to entry: The handwheel or lever can include powered axial feed or powered unprogrammed positioning of spindle or workpiece.

3.2

pillar type vertical manual drilling machine

manual drilling machine (3.1) in which the drilling head and working table are mounted in adjustable positions on a vertical column

4 Terminology, designation of axes and machine configurations

For the nomenclature and terminology of a pillar type vertical manual drilling machine, see [Figure 1](#).